

they can be readily divided by closely following these descriptions. Also an article in the Canadian Entomologist, Vol. XXXVII, No. 6, p. 216, may help to orient one unused to the genus. The larvæ chrysalids and eggs of these two species also are very distinct. Of course no one denies that these species are closely allied, as also are *calanus* and *edwardsi*, but their distinctive characters are permanent and stable from generation to generation and appear in all the stages from the egg to the imago. Some of the members of the genus *Thanaos* are much more confusing than the *Theclas* here referred to but their validity as separate species is unquestioned. The true test of the identity of species is found in breeding. Let Dr. Skinner breed a few of these butterflies and then let us hear his conclusions. However he should not despair. I remember distinctly when I, as a boy, was quite convinced that *Argynnis cybele* and *A. atlantis* were identical and that all preceding entomologists were entirely wrong. Such ideas should be kept secret until one has facts wherewith to prove them. Any premature disclosure of one's psychical processes without sufficient facts or adequate logic to substantiate them is unfortunate as it tends to mislead the inexperienced beginners and confuses the literature of the subject.

DESCRIPTION OF A VARIETY OF AUTOMERIS IO, FAB.

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Automeris io, variety *fuscus*, new.

Male. Expanse of wing 2" to 2 $\frac{3}{8}$ ". Head, antennæ, thorax, abdomen, legs and ground color of wings a bright yellow. Discal markings on the fore wings in the form of an irregular broken oval with a dot in the center. Large eyes and broad yellow marginal bands on the hind wings.

Female. Expanse of wing 2 $\frac{3}{4}$ " to 3 $\frac{1}{8}$ ". Head and thorax dark brown. Antennæ, abdomen, legs and under-surface of wings brick color. Markings on the upper surface of fore wings pronounced, the whole having a general rich dark brown effect. Ground color of hind wings, dark yellow with large eyes.

Habitat. — Providence and Cranston, R. I.

Eggs. — First all cream color. At the expiration of two days a blue spot appears at the top of the eggs.

Larva. — First dark brown. Later some are brown and some are green, with the usual *io* markings and spines.

Food plant, *Baptisia tinctoria*.

Pupa and cocoon same as the usual forms. The first specimen of this variety of *A. io*, found by me was a female which I now have in my collection. The second was also a female which I secured alive July 3, 1906, and from which I got about ninety-five eggs. From these eggs I received about the same number of larvæ which I fed on wild cherry. The larvæ all lived until after the second molt, when all of them died, apparently from some bacterial disease or on account of wrong food plant. July 14, 1906, I found a brood of twenty-nine *io* larvæ on *Baptisia tinctoria*, which I fed on this food plant. In September, 1906, I got from the cocoons under usual conditions, five males and two females. I am now getting, February, 1907, some specimens of this variety by forcing the same.

Type. — No. 10274 in the U. S. National Museum.

A GENUS AND SPECIES OF GEOMETRIDÆ NEW TO NORTH AMERICA.

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The genus *Trichopteryx* Hübn. has not before been represented in the North American fauna, though several species are found in Europe. In a recent "List of British Columbian Lepidoptera," the Geometridæ were arranged by Rev. Geo. W. Taylor, who places under this genus *Nyctobia viridata* Pack. (*Agia eborata* Hulst.); but it cannot rest in the genus for reasons I have stated in a paper on the genus *Nyctobia* Hulst., awaiting publication. The type of *Trichopteryx* is *carpinata* Bork., in the ♂ of which vein 8 of hind wings is connected by a bar with cell, near the cell's end, and in *viridata* it is united with it for nearly the cell's length. The genus is thus characterized.

Trichopteryx Hübn.

Type *carpinata* Bork.

FIXED.
Antennæ, flattened, slender.
Palpi, short.
Front, protuberant, smooth.
Tongue, developed.

VARIABLE.
Thorax, with low tuft posteriorly.
Abdomen, not tufted.
Venation of hind wings, ♂, six and seven widely separate. Three and four